

# Hedging and IAS

**T**his article aims to provide a basic introduction to certain aspects of hedge accounting under IAS 39 (similar in all relevant respects to FRS 26<sup>1</sup>, its UK GAAP equivalent) and to their tax implications. The focus of the article is on the hedging of interest rate risk with the aim of providing, by way of example, a basic introduction to ‘cash flow hedge accounting’ and ‘fair value hedge accounting’ (which are also relevant to other kinds of risk).

The accounting practice applicable to UK entities not applying IAS 39 (or FRS 26) is referred to below as ‘old UK GAAP’.

The article does not cover all aspects of hedging and a number of other important aspects of IAS 39 (or FRS 26) or their tax implications (including the transitional rules). Further, the accounting treatment discussed represents the authors’ understanding of IAS 39, the current version of which is comparatively new and the precise application of which is, in a number of areas, uncertain.

Broadly, the issue which both the accounting and tax rules dealing with hedging are attempting to deal with is that all derivatives are, under IAS 39, measured at fair value even if they are hedging an instrument which is not so measured. This gives rise to scope for volatility of profits in a manner which does not reflect the underlying hedged position.

## Example

Assume that a company, with a 31 December year end, borrows £100,000 for four years at a fixed rate of 7.5% (being LIBOR<sup>2</sup> at inception) and that the company on-lends the same amount for the same term at a variable rate of LIBOR from time to time. The company wishes to hedge the transaction against any change in interest rates so that it is ‘flat’ in each of the four years. It therefore enters into an interest rate swap (notional principal £100,000) under which it agrees to pay out LIBOR from time to time and receive a fixed amount of 7.5% (being LIBOR at inception). (Assuming a flat economic position makes it clearer to see the difficulties created by IAS 39.)

The cash flows throughout the term of the transactions, ignoring principal and

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net settlement under the swap, can be represented as in Figure 1 below.

By entering into the swap, the company can be looked at either as having converted its variable rate loan asset into a fixed rate loan asset paying interest at 7.5%, or as having converted its fixed rate loan liability into a variable rate loan liability on which interest is payable at LIBOR from time to time. In both cases, the company will be left with no net profit.

It is assumed that the relevant principal terms of the loans and the swap

## POSITION UNDER OLD UK GAAP Accounting treatment

How would the company account for the above transactions under old UK GAAP?

Broadly, the loans would be carried on the balance sheet at their principal amounts and adjusted for accrued interest less amounts paid/received.

Hedge accounting would be likely to be available in relation to the swap. Prior to the introduction of FRS 26, there was no UK standard dealing comprehensively with hedge accounting

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are the same (for instance the dates on which rates are reset are at the beginning, and the dates on which payments are made are at the end, of each year) and that the swap cannot be terminated early by the swap counterparty.

LIBOR is in fact assumed to change at the end of each year giving rise to the cash flows in Figure 2 overleaf. The impact upon the fair value of the swap is set out, on a number of simplified assumptions, in Figure 3 overleaf.

(although FRS 13 addresses disclosure aspects). Nevertheless hedge accounting under old UK GAAP is thought to permit the swap, which has an initial cost of nil, to remain ‘off-balance sheet’ and amounts in respect of the swap only to be recognised to the extent necessary to adjust the variable rate interest income to a fixed rate (if the hedge were considered to be of the variable rate loan asset) or the fixed rate interest expense to a floating rate (if the hedge were considered to be of the fixed rate loan

**Figure 1: Payments and receipts**

	Receipt	Payment	Net
Variable rate loan asset	LIBOR	–	
Swap	7.5%	LIBOR	
Fixed rate loan liability	–	7.5%	
Total	LIBOR + 7.5%	LIBOR + 7.5%	Nil

liability). Changes in the fair value of the swap would *not* otherwise be required to be taken into account in determining profit or loss (or reflected in the balance sheet) but would instead be a matter for disclosure. The result would be a flat profit and loss in each of the four periods as per the net cash flows in Figure 2.

**Tax treatment**

The above treatment would generally be respected for tax purposes such that the company would not expect to pay tax in any of the four periods (assuming no adjustment as a result of the particular facts).

**POSITION UNDER IAS 39**

**The problem**

What is the position under IAS 39? It is assumed on the facts that the loan asset and loan liability are such that they would ordinarily be accounted for at amortised cost.<sup>3</sup> By contrast, as the swap is a derivative, it automatically falls to be treated as within the category of ‘financial assets or financial liabilities at fair value through profit or loss’ (FAFVPL) with the result that it is measured at fair value with fair value gains and losses recognised in profit or loss. (Those fair value gains and losses

are shown in Figure 3.) This gives rise to the potential for volatility in the income statement which does not reflect the ‘flat’ economic position, as illustrated in Figure 4 overleaf.

What options are open to the company under IAS 39 and what are their implications? The options broadly break down into the following:

- *Option 1*: do nothing;
- *Option 2*: seek to adopt cash flow hedge accounting with the variable rate loan asset as the hedged item;
- *Option 3*: seek to adopt fair value hedge accounting with the fixed rate loan liability as the hedged item;
- *Option 4*: seek to exercise the fair value option in relation to the fixed rate loan liability so that both the loan and swap are within the ‘FAFVPL’ category.

Each of these options is considered from an accounting and then a tax perspective. Figure 6 on the last page contains a summary of the overall position.

**Accounting position**

*Option 1 – do nothing*

The default accounting treatment is as set out above and in Figure 4 and the company could simply accept the volatility in the income statement which results.

*Option 2 – cash flow hedge accounting*

Under IAS 39 the swap must be carried on the balance sheet at fair value and the hedging available under old UK GAAP outlined above is not possible. IAS 39 does, however, provide for hedge accounting in relation to three types of hedging relationships: fair value hedges, cash flow hedges and hedges of net investments in foreign operations (the last of which is not considered further).

The company could under IAS 39 designate the swap to be a ‘cash flow hedge’ of the LIBOR interest payments under the variable rate loan asset since these give rise to an exposure to variability in cash flows which could affect profit or loss.

IAS 39 imposes strict conditions for hedge accounting to be permissible. Broadly, IAS 39 requires:

- the formal documentation of the hedge at inception and imposes both a prospective and retrospective test of hedge effectiveness; and
- both the hedging instrument and the hedged item to qualify as such.<sup>4</sup>

The conditions for cash flow hedge accounting are assumed to be satisfied here.

The effect of cash flow hedge accounting is as follows:

- The accounting treatment of the variable rate loan asset (as well as the fixed rate loan liability) is unaffected.
- As regards the swap, on the simplified assumption that fair value movements of the swap are equal and opposite to the fair value movements of the expected future hedged cash flows on the variable rate loan asset (so that the hedge is fully effective), all gains and losses in respect of the swap will be recognised in equity (here reserves) rather than in profit or loss.
- The fair value gains and losses in equity will be recognised in profit or loss in the same period or periods during which the hedged transaction affects profit or loss.

The result of the above treatment is that fair value movements in respect of the swap, which is assumed to be fully effective, are recognised in reserves, rather than the income statement, and only ‘recycled’ into the income statement to the extent required to adjust the variable rate interest flows into the hedged fixed rate.

The double entries in period 2 would be as set out below (although alternative entries are understood to be possible<sup>5</sup>):

To reflect the receipt of interest under the variable rate loan:

**Figure 2: Cash flows**

Period	LIBOR at beginning of period/ end of previous period	Variable rate interest under loan asset (£)	Fixed rate interest under loan liability (£)	Receipts/ (payments) under swap (7.5% - LIBOR) (£)	Net flows (£)
Year 1	7.5%	7,500	(7,500)	–	Nil
Year 2	6.5%	6,500	(7,500)	1,000	Nil
Year 3	5.5%	5,500	(7,500)	2,000	Nil
Year 4	8.5%	8,500	(7,500)	(1,000)	Nil
<b>Total</b>		<b>28,000</b>	<b>(30,000)</b>	<b>2,000</b>	<b>Nil</b>

**Figure 3: Fair value of swap**

Period	Fair value brought forward (£)	Fair value gain/loss in period (£)	Amount of fair value realised by (receipt)/ payment (£)	Fair value carried forward (£)	Movement between periods (£)
Year 1	–	2,648	–	2,648	2,648
Year 2	2,648	2,044	(1,000)	3,692	1,044
Year 3	3,692	(2,614)	(2,000)	(922)	(4,614)
Year 4	(922)	(78)	1,000	–	922
<b>Total</b>		<b>2,000</b>			<b>Nil</b>

Dr Cash £6,500  
Cr Interest income £6,500

To reflect the change in fair value of the swap:

Dr Swap (balance sheet) £2,044  
Cr Hedging reserve (equity) £2,044

To reflect the net receipt of £1,000 under the swap (see Figure 2):

Dr Cash £1,000  
Cr Swap (balance sheet) £1,000

To 'recycle' the appropriate portion of the fair value gains in equity from the hedging reserve to the income statement:

Dr Hedging reserve (equity) £1,000  
Cr Interest income £1,000

As will be noted, taking into account the amounts recycled from equity, overall interest income of £7,500 (being interest at the hedged fixed rate) would be reflected in the income statement (and offset by an interest expense of £7,500, leaving a profit of nil). See Figure 5 overleaf.

*Option 3 – fair value hedge accounting*

The company could designate the swap to be a 'fair value hedge' of the exposure to changes, as a result of changes in LIBOR, to the fair value of the 7.5% fixed interest payments and principal under the fixed rate loan liability, the value of which will change as interest rates change. The conditions for hedge accounting to be available (see above) are once again assumed to be satisfied.

The swap could not be designated as a fair value hedge of the variable rate loan asset since the fair value of the variable rate loan should not change as a result of interest rate movements (ignoring for simplicity the 12-month lag between the interest reset and payment dates).

The effect of fair value hedge accounting is as set out below. Note that

under cash flow hedge accounting it is the treatment of the swap which changes from what it would have been absent hedge accounting but under fair value hedge accounting it is the treatment of the hedged item which changes.

- Fair value gains or losses in respect of the swap would be recognised in profit or loss (as they would be if hedge accounting did not apply).
- The accounting treatment of the fixed rate loan liability, which is the hedged item, changes. Any gain or loss in respect of the hedged portion of the fixed rate loan liability (that is, the 7.5% fixed interest payments and the loan principal) which is attributable to changes in LIBOR adjusts the carrying value of the loan and is recognised in profit or loss.

The fair value gains and losses in respect of the hedged portion of the fixed rate loan which are attributable to changes in LIBOR are assumed here to be equal and opposite to the changes in fair value of the swap in Figure 3 so that they offset in determining profit or loss (that is, full hedging effectiveness is assumed).

On the facts, it seems that the above accounting treatment may be simplified somewhat by continuing to accrue interest at the fixed rate and by ignoring the accrued interest in calculating fair value movements in respect of the loan.<sup>6</sup> On this basis, the double entries in period 2 would be as follows:

To reflect the interest expense in respect of the fixed rate loan:

Dr Interest expense £7,500  
Cr Cash £7,500

To reflect the change in fair value of the swap:

Dr Swap (balance sheet) £2,044  
Cr Interest expense £2,044

To reflect the net receipt of £1,000 under the swap:

Dr Cash £1,000  
Cr Swap (balance sheet) £1,000

To reflect the change in fair value of the loan (ignoring the £1,000 fair value movement reflected in the interest expense above, which would be £1,000 less if calculated by reference to the year 2 LIBOR rate):

Dr Interest expense £1,044  
Cr Fixed rate loan liability £1,044

The result is that, taking into account the swap, there is a net interest expense of £6,500 (which offsets the £6,500 interest income under the variable rate loan, leaving a profit of nil).

*Option 4 – fair value option*

The company may not wish to be subject to the somewhat onerous requirements for hedge accounting to be available (for example, the documentation and effectiveness testing requirements) but would nevertheless prefer to avoid the volatility in the income statement shown in Figure 4. Accordingly, the company may be able to exercise the so-called 'fair value option' in relation to the fixed rate loan liability and elect for it to be treated, in the same way as the derivative, as within the 'FAFVPL' category (which applies to financial liabilities also). Fair value gains and losses in respect of the fixed rate loan liability would be recognised in the income statement, thus achieving a natural offset to the extent that the fair value movements of the swap and the loan matched (which they may not do perfectly).

Exercise of the fair value option is, however, broadly speaking, only permitted upon initial recognition of the fixed rate loan liability and cannot be revoked (as may be preferable if the swap were terminated before the end of the four year term).<sup>7</sup>

**Tax position**

What are the tax consequences of the above options?

*Option 1 – do nothing*

As noted, the company could simply accept the volatility that comes from valuing the swap at fair value but each of the loans at amortised cost.

It will be noted that if the tax treatment (in particular of the derivative) were to follow the accounting treatment there would, in many cases (in particular taking into account the limited ability to carry back losses), be scope for irreversible tax to arise in respect of fair

**Figure 4: Income and expense in income statement in absence of hedge accounting**

Period	Variable rate interest recognised in income statement (£)	Fixed rate interest recognised in income statement (£)	Fair value movements in respect of swap recognised in income statement (£)	Net amount of income/ (expense) in income statement (£)
Year 1	7,500	(7,500)	2,648	2,648
Year 2	6,500	(7,500)	2,044	1,044
Year 3	5,500	(7,500)	(2,614)	(4,614)
Year 4	8,500	(7,500)	(78)	922
<b>Total</b>	<b>28,000</b>	<b>(30,000)</b>	<b>2,000</b>	<b>Nil</b>

value gains when such gains would be ‘reversed out’ later as a result of subsequent fair value losses – that is, without the fair value gain ever being realised into cash.

Will the tax treatment follow the accounting treatment for the company? If the company is a ‘securitisation company’ (as widely defined in the Finance Act 2005, s 83), special rules, designed to ensure that such companies are taxed in accordance with old UK GAAP, would apply.

Assuming this is not the case, then the company would need to rely on the ‘Disregard Regulations’<sup>8</sup> to avoid volatile tax profits. The Disregard Regulations apply for periods of account beginning on or after 1 January 2005 (automatically unless revoked).<sup>9</sup> Regulation 9 of the Disregard Regulations applies to ‘interest rate contracts’ which is defined widely and includes interest rate swaps such as the swap in the example. Provided that the relevant conditions are satisfied, debits and credits in respect of the swap will be brought into account on the assumption that ‘an appropriate accruals basis’ had been used in relation to the swap. This is thought to achieve here for tax purposes something similar to hedging under old UK GAAP – that is, for the company to be taxed in relation to the swap only to the extent that swap payments effectively adjust the interest flows on the hedged item.

The two conditions to be satisfied for Regulation 9 to apply are as follows:

- There must be a ‘hedging relationship’ between the contract or a portion of the contract and any of the risks arising in respect of an asset, liability, receipt or expense (the ‘hedged item’); and
- ‘Fair value profits or losses’ arising on the hedged item or in relation to any of

the risks arising in respect of the hedged item, or any portion of the hedged item, are not brought into account for the purposes of corporation tax for the period.

The first condition will be satisfied either where hedge accounting is adopted or where (as under Option 1) hedge accounting is not adopted but the hedging instrument is ‘intended’ to act as a hedge. The second condition is capable of being satisfied whichever of the variable rate loan asset or the fixed rate loan liability is ‘intended’ to be the hedged item given that both are accounted for at amortised cost.

The result of Regulation 9 applying is likely to be that the company would be taxed on profits equal to the net cash flows (of nil) shown in Figure 2 and would therefore achieve hedging for tax purposes (that is, tax on profits which reflected the hedge) albeit not for accounting purposes.

*Option 2 – cash flow hedge accounting*

If the company adopted cash flow hedge accounting, both conditions for Regulation 9 to apply should once again be satisfied. Accordingly the derivative would be taxed under an ‘appropriate accruals basis’ rather than in line with its accounting treatment (the net effect, in the case of the fully effective swap in the example, being that the fair value movements in equity would be disregarded for tax). Help is needed from the Disregard Regulations because the ‘burying’ of fair value movements in reserves under cash flow hedge accounting does not take those fair value movements out of the charge to corporation tax – those amounts are *prima facie* taxable as they would be if they were recognised directly in the income statement (see Finance Act 2002, Schedule 26, paragraph 17B).

*Option 3 – fair value hedge accounting*

The position changes, however, if fair value hedge accounting is adopted.

The first condition would be satisfied since the swap would be a designated hedge of the fixed rate loan liability. HMRC’s view is understood to be that the second condition would not usually be satisfied.<sup>10</sup> Under fair value hedge accounting, movements in the fair value of the hedged flows under the fixed rate loan liability arising as a result of interest rate movements would be reflected in the income statement and would generally be taxed (although not for instance if the creditor were connected to the company so that an amortised cost basis of accounting applied for tax purposes – see the Finance Act 1996, s 87). The result would be that the fair value movements in respect of the swap recognised in the income statement would be brought into account for corporation tax purposes, as would, generally speaking, the fair value movements in respect of the hedged flows under the fixed rate loan liability which are attributable to changes in LIBOR. Volatility of taxable profits could therefore arise to the extent that the hedge was ineffective.

*Option 4 – fair value option*

If the company were to exercise the fair value option in relation to the fixed rate loan liability (the fair value of which will move as interest rates change), Regulation 9 would not apply if the fixed rate loan were considered to be the hedged item. This is because the second condition for Regulation 9 to apply would not usually be satisfied. In that case, fair value gains and losses in respect of the swap as well as fair value gains and losses in respect of the loan relationship would be brought into account for the purposes of corporation tax and would need to

**Figure 5: Cash flow hedge accounting**

Period	Interest accrued in income statement in respect of variable rate loan (£)	Fair value movements in respect of swap recycled from equity to income statement (£)	Net interest income in income statement (£)	Fixed rate interest accrued in income statement (£)	Net amount of income/ (expense) in income statement (£)	Movement in equity (after recycling) (£)
Year 1	7,500	–	7,500	(7,500)	Nil	2,648
Year 2	6,500	1,000	7,500	(7,500)	Nil	1,044
Year 3	5,500	2,000	7,500	(7,500)	Nil	(4,614)
Year 4	8,500	(1,000)	7,500	(7,500)	Nil	922
<b>Total</b>	<b>28,000</b>	<b>2,000</b>	<b>30,000</b>	<b>(30,000)</b>	<b>Nil</b>	<b>Nil</b>

offset perfectly to ensure a flat tax position. (Similarly, Regulation 9 would not apply if there were not considered to be a 'hedged item' at all.)

If the variable rate loan asset were considered to be the hedged item for Regulation 9 purposes, Regulation 9 would apply. This would (perhaps surprisingly) be likely to result in volatility of taxable profits given that any taxable fair value gains and losses in respect of the fixed rate loan liability (now reflected in the income statement) would not be offset for tax purposes by taxable fair value gains and losses in respect of the swap, to which an 'appropriate accruals basis' would apply for tax purposes.

**Conclusion**

In summary, Regulation 9 of the Disregard Regulations assists in avoiding volatile taxable profits and losses in a hedging context only where no accounting solution is adopted (Option 1) or the accounting solution adopted is ineffective from a tax perspective because the effect is merely to push fair value movements into reserves where they continue to be taxable (Option 2). If, however, the fair value movements of the swap are intended to be offset for accounting purposes by fair value movements in respect of the hedged item

**ACCOUNTING CONCEPTS**

If any readers feel they need guidance at a fairly basic level on accounting topics, or would like to write on a particular subject, could they please get in touch with the Editor at alison.lovejoy@lexisnexis.co.uk or Stuart Collins of PKF at stuart.collins@uk.pkf.com who is acting as our adviser on *Accounting Concepts*.

Topics already covered in the Accounting Concepts series are: *UITF 40* (Issue 788), *Convertibles & IAS Part 1 & 2* (780, 786); *IRFS & GAAP* (773); *Limited Liability Partnerships* (757); *UK GAAP & IAS* (Issue 755); *FRS 12* (754); *Application Note G* (749); *IAS & the Impact on Intellectual Property Transactions* (748); *Accounts Based on IFRS* (726).

(see Options 3 and 4), the Disregard Regulations do not generally apply and the economic hedge must be sufficiently effective to avoid volatility of taxable profits.

**Notes**

<sup>1</sup> FRS 26 currently only applies to listed entities for periods commencing

on or after 1 January 2005, and to certain other entities for periods commencing on or after 1 January 2006. The ASB is, at the time of writing, still considering responses to proposals to extend FRS 26 more widely for periods beginning on or after 1 January 2007.

<sup>2</sup> Here the annual £ London Interbank Offered Rate.

<sup>3</sup> The loan asset is assumed to fall within the 'loans and receivables' category of financial assets.

<sup>4</sup> Note that a 'held to maturity' financial asset does not qualify as a hedged item under a hedge of interest rate risk.

<sup>5</sup> An alternative accounting treatment thought to be possible would be to recognise the swap receipt for the year of £1,000 directly in the income statement (avoiding the need for recycling) and to disregard the swap accrual in fair-valuing the swap – this would produce a fair value gain (recognised in equity) of £1,044 – see the last column of Figure 5.

<sup>6</sup> As noted above, it may also be appropriate to adopt a similar approach in relation to the swap.

<sup>7</sup> IAS 39 is amended, in a manner which has now been approved by the European Commission, with effect for periods beginning on or after 1 January 2006 (although early adoption of the revised standard is encouraged) and there are now additional conditions to exercise of the fair value option (which the ASB has recently introduced into FRS 26 also). These are not considered here.

<sup>8</sup> The Loan Relationship and Derivative Contracts (Disregard and Bringing into Account of Profits and Losses) Regulations 2004 (SI 2004 No 3256) as amended by SI 2005 No 2012.

<sup>9</sup> HMRC are considering proposals under which, broadly and with some exceptions, the effect of an election to disapply Regulation 9 treatment would be for the company to be taxed on the fair value movements of its interest rate contracts reflected in its income statement and for fair value movements recognised in equity in respect of interest rate contracts acting as designated cash flow hedges to be disregarded until recycled from equity into the income statement.

<sup>10</sup> Notwithstanding that fair value movements attributable to risks not hedged by the swap, which would not be reflected in the income statement under fair value hedge accounting, would not be brought into account for the purposes of corporation tax.

**Figure 6: Summary**

	<i>Accounting position</i>	<i>Tax position</i>
Option 1 – do nothing	Volatility in income statement reflecting fair value movements in respect of swap.	Disregard Regulations apply. Taxed on hedged position.
Option 2 – cash flow hedge accounting	Volatility arising from fair value movements in respect of swap pushed into reserves. Income statement reflects hedged position.	Disregard Regulations apply. Taxed on hedged position.
Option 3 – fair value hedge accounting	Fair value movements of swap matched by fair value movements of hedged cash flows. Volatility avoided to extent hedge fully effective.	Disregard Regulations not thought generally to apply. To avoid volatility of taxable profits need to ensure that hedge is sufficiently effective.
Option 4 – fair value option	Fair value movements of swap matched by fair value movements of hedged item. Volatility avoided to extent these match.	Whether Disregard Regulations apply depends on the item (if any) which the swap is 'intended' to hedge.